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UNITED STATES DEPARTMENT OF AGRICULTURE

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THE LAST CHANCE

FOR PATRIOTISM TO PUT MONEY INTO ITS OWN POCKET

HELP YOUR GOVERNMENT - AND MAKE A SOUND INVESTMENT

BUY PEACE-WITH-VICTORY BONDS!

CEREAL AND FORAGE INSECT INVESTIGATIONS

W. R. Walton, Entomologist in Charge

The European corn-borer work has been reorganized under this branch of the Bureau with separate headquarters for the investigational and control activities. Investigational headquarters are located at No. 10 Court St., Arlington, Mass., and this work is now in full swing. The personnel at present is as follows: D. J. Caffrey, assistant in charge; H. E. Smith, entomological assistant; R. H. Van Zwaluwenburg, scientific assistant; G. B. Fisher, scientific assistant; W. B. Turner, scientific assistant; C. W. Curtin, scientific assistant; J. H. Moore, field assistant; F. L. Pendergast, stenographic clerk; G. F. Greene, laborer.

L. H. Worthley, formerly engaged under A. F. Burgess as agent in preventing spread of moths, has been placed in charge of the control work, with headquarters at 43 Tremont St., Boston, Mass. This phase of the work for the present will be carried on mainly under a fund especially appropriated by the State of Massachusetts in cooperation with the State Department of Agriculture. Saul Phillips has been appointed as assistant under Mr. Worthley for the field work, and entered upon his new duties on April 15. Mr. Phillips has had fifteen years of experience in insect control work in eastern Massachusetts, including gipsy and brown-tail moth work, and also considerable experience in mosquito control on the North Shore. He is, therefore, well equipped to handle the work which has been entrusted to his care.

A force of 400 men was put to work cleaning up in the infested area on April 15, when the special State appropriation of $30,000 became available. It is expected that this work subsequently will be provided for by the Federal Government, if Congress agrees to allow a suitable appropriation for the work.

Several methods of attacking the insect have been proposed, and are now being given a thorough trial. In view of the short period of time available before the moths emerge from their winter quarters, it probably will not be possible to treat effectively the entire infested area this spring.

Farmers' Bulletin 1046, issued April 26, deals with the European corn borer.

C. K. Fisher, who has recently returned from the military service, and who was formerly attached to the Wellington, Kans., field station, has been reinstated in the entomological service, effective April 28, and has been assigned to the Wichita, Kans., field station for duty.

J. S. Stanford, recently employed in the alfalfa weevil investigation under Geo. I. Reeves, resigned from the service, effective April 12.

W. B. Cartwright, formerly attached to the Knoxville, Tenn., field station, has been released from the military service and reassigned to the Knoxville station under G. G. Ainslie. He returned to duty April 16.

W. B. Turner, formerly engaged as Scientific Assistant on the wireworm and cutworm investigations at Hagerstown, Md., has been transferred to the European corn borer investigations and is now located at 10 Court St., Arlington, Mass., where he will be under the direction of Donald J. Caffrey.

Wesley L. Miles, Ph. B., a graduate of Syracuse University, has been engaged as special field agent on the European corn borer project and assigned to the work under D. J. Caffrey.

A cooperative investigation of the wireworms attacking cereal crops has been arranged between the Bureau of Entomology and the Washington State Agricultural Experiment Station. This branch of the Bureau has agreed to furnish a man who will be stationed in central Washington during the growing season of the year, to conduct the Bureau's portion of this cooperative work. F. R. Cole of the Forest Grove, Ore., station has been assigned to this project for the present.

TROPICAL AND SUBTROPICAL FRUIT INSECT INVESTIGATIONS

C. L. Marlatt, Entomologist in Charge

Forerunners of the big brood of the periodical cicada of this year are already making their appearance. On the grounds of the Chevy Chase Club where only a few scattered trees remain in places, numerous exit holes were in evidence April 24, and a single full-grown pupa was found on the surface, possibly killed by the low temperatures of that period. The prediction in the March News Letter of possible earlier emergence this year may not be realized, for after all the subterranean temperatures do not vary sufficiently even in a warm winter to make a large element of difference. The Bureau will be glad to receive any reports of first appearances throughout the range of the brood.

FEDERAL HORTICULTURAL BOARD

C. L. Marlatt, Chairman

The Texas pink bollworm act of 1919 provides in section 15 for the establishment of a commission of five entomologists to determine the necessity for the establishment of quarantine areas within the State of Texas. The members of the commission as now created under the terms of the act are: Ernest E. Scholl, designated by the Commissioner of Agriculture; W. D. Hunter, designated by the Federal Horticultural Board, U. S. Department of Agriculture; F. B. Paddock, designated by the Agricultural and Mechanical College of Texas; N. Hess, appointed by the Governor of Texas; and an entomologist to be appointed by the county judge of the county in which the fields believed to be infested are located. On the recommendation of this commission the necessary quarantine action has been taken by the Governor under the new law with respect to the several districts in Texas which have at any time been infested by the pink bollworm, and also with respect to the border noncotton zones.

Entomological and pathological inspections of the various plant introduction gardens of this Department are regularly made by the inspectors of the Federal Horticultural Board. Such inspection was made of the introduction gardens at Chico, Calif., in December, 1918, by C. C. Thomas and H. L. Sanford; at Brooksville and Miami, Fla., in February, 1919, by C. H. Kauffman and A. C. Mason;

and the gardens at Mandan, N. Dak., were given an inspection during the month of April by J. T. Rogers.

George Compere, who has returned to his official State duties at the port of San Francisco, has submitted a very informing report on his work of three months at the port of New Orleans. This report is a model of completeness and fully demonstrates the need of a regular inspection service at this port. Some of the difficulties of this service are indicated in a recent report from Mr. Courtney of a woman caught endeavoring to bring a number of small trees concealed under her skirts. If such efforts are to be made it is fortunate that the present style of spareness in woman's dress much limits such possibilities.

The Board is cooperating with the State of New Jersey and the Bureau of Entomology in the enforcement of the Japanese beetle quarantine. C. H. Hadley has been commissioned under the Board to be in general field charge of the work and the Board has also authorized three temporary assistants for a six months' period to cover the working season.

The barberry and Mahonia quarantine for the purpose of controlling the black stem-rust of various small grains was promulgated April 15, effective May 1, 1919.

A potato wart quarantine was promulgated by the State of Pennsylvania March 10. No Federal quarantine action will be taken for the present with respect to the outbreak of this disease inasmuch as the infested area is entirely within the State and probably can be controlled satisfactorily by State authorities.

A conference on the subject of the gipsy and brown-tail moth quarantine has been called for May 6 at Washington. A. F. Burgess reports that this year there will be no need of an extension of the quarantine lines and in fact notable reductions can be made in some places. There will be no necessity, therefore, for a public hearing.

LIBRARY

Mabel Colcord, Librarian

New Books

Baumberger, J. P. A nutritional study of insects with special reference to microorganisms and their substrata. Jour. Exp. Zool., v.28, no. 1, p. 1-81, April 5, 1919. (Contribution from the Entomological laboratory of the Bussey Institution, Harvard University.) Bibliography, p. 75-81.

Felt, E. P. New Philippine gall midges with a key to the Itonidae. Philippine Jour. Sci., v.13 (D), no. 6, p.281-325, 1 pl., Nov.,1918.

Hodge, C. F., Civic biology; a textbook of problems, local and national, that can be solved only by civic cooperation. 381 p., illus., 4 pl. Boston, New York, etc., 1918.

Imms, A. D. Observations on the insect parasites of some Coccidae. Quarterly Jour. Micros. Sci., new ser. no. 251 (v.63, pt. 3), p.293-374, illus., December, 1918.

Moore, William. The effect of laundering upon lice (Pediculus corporis) and their eggs. Journal of Parasitology, v. 5, p. 61-68, December, 1918.

Sedgwick, S. N. Common British beetles and spiders and how to identify them. 62 p. illus. London.

Stitt, E. R. Practical bacteriology, blood work and animal parasitology. Ed. 5, 559 p., illus. Philadelphia, 1918.

Tileston, Wilder. Trench fever, a critical review. Jour. Amer. Med. Assoc., v.72, no. 6, p.399-401, February 8, 1919.

Tower, W. L. The mechanism of evolution in Leptinotarsa. 384 p.,illus., 18 pl. Washington, Carnegie Institution, 1918. Bibliography, p.382-384.
Vaughan, V. C. Infection and immunity. 238 p. Chicago, 1915.

DECIDUOUS FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Entomologist in Charge

The Bureau's laboratory at Benton Harbor, Mich., has been discontinued. F. L. Simanton, who has been in charge of this laboratory, has been transferred to Monticello, Fla., where he will assist in connection with pecan insect investigations.

Wm. A. Hoffman, who has been working with J. B. Gill at Monticello, Fla., in connection with pecan insect investigations, has been transferred to Brownwood, Tex., where he will be engaged in pecan insect investigations.

E. H. Siegler, who has been in charge of the Bureau's laboratory at Wallingford, Conn., has been transferred to Washington. He will make occasional trips to Dover, Del., and Wallingford, Conn., to assist in the work at these places.

William Yetter, a graduate of the Colorado Agricultural College, has been appointed as scientific assistant, and will be engaged in codling moth investigations in the Grand Valley, with headquarters at Grand Junction, Colo.

Dr. C. H. Richardson, a graduate of Stanford University and postgraduate of Harvard and Columbia Universities, has been appointed insect physiologist, and will be engaged in the investigation of the mineral oil group of insecticides, soaps, soil fumigants, etc., with headquarters at Washington, D. C. This work is being carried out in cooperation with the Bureau of Chemistry.

SOUTHERN FIELD CROP INSECT INVESTIGATIONS

J. L. Webb, Entomological Assistant Acting in Charge

J. K. Dickerson, junior chemist, Bureau of Chemistry, has been detailed by the Bureau of Chemistry to take up certain work of a chemical nature at the boll weevil laboratory at Tallulah, La., in connection with the application of arsenical dust poisons to cotton for the control of the boll weevil. Present indications are that the cotton planters of the South will use considerable quantities of arsenicals in dust form during the coming season, in combating the boll weevil.

Dr. W. D. Pierce has returned to Washington after making an extended trip, including El Centro, Cal., and Houston, Tex., in his itinerary.

S. E. Crumb has returned to Clarksville, Tenn., after spending some time in Washington.

G. L. Garrison has been detailed to assist R. H. Hutchinson in the poisonous gas experiments.

TRUCK CROP INSECT INVESTIGATIONS

F. H. Chittenden, Entomologist in Charge.

To the present date, about 550,000 sweet-potato draws have been distributed to the growers on infested properties in the Baker-Charlton area in Florida. Distribution will continue throughout the month of May. The beds planted by the Florida Plant Board are just beginning to yield, and it has been necessary to

purchase many draws in the open market. The confidence of the growers has been retained and it is believed that there will be little difficulty in securing more effective cooperation in the future. A reinspection of the infested properties will be undertaken during midsummer and at harvest time to demonstrate the effectiveness of the procedure. A small-scale eradication test will be undertaken against the seaside morning-glory in the vicinity of Daytona, Fla., during the summer, to ascertain the feasibility of a campaign having in view the complete eradication of the weevil in the State of Florida.

B. L. Boyden, stationed at Daytona, Fla., will visit sweet-potato weevil laboratories in Mississippi and Louisiana during the month of May, to confer with K. L. Cockerham and C. E. Smith as to experimental work on heat treatment of sweet potatoes and on morning-glory eradication.

Thos. H. Jones has returned to Florida to resume work against the insect enemies of watermelons which was terminated by the frost of April 2.

Q. S. Lowry, truck-crop extension entomologist in Massachusetts, resigned May 1 to enter other employment.

M. J. Kerr, who has received his discharge from the military service, will return to his work in inspection of the sweet-potato weevil at New Orleans, La.

STORED PRODUCT INSECT INVESTIGATIONS

E. A. Back, Entomologist in Charge

A. O. Larson, formerly engaged in the Extension Work with Dr. A. L. Quaintance, has been appointed entomological assistant to undertake investigation of bean and pea weevils in California. Mr. Larson has established temporary headquarters at 800 North Marguerita Ave., Alhambra, Calif., and writes that he has the hearty cooperation of the bean growers' association and of warehousemen who are becoming alarmed at the rapid increase in weevil infestations. The old established belief existing throughout the South that beans grown in California are free from infestation is rapidly being dispelled by the large amount of infested California material that is now appearing on the market.

Richard T. Cotton, who has been in Washington for several weeks, has returned to Orlando, Fla., to continue his investigations of weevils attacking corn.

S. E. McClendon, extension agent in Georgia, is doing good work in interesting farmers throughout that State in the construction of better facilities for the protection of corn from weevils. He writes that a number of modern cribs will be erected this summer and that he is kept busy advising farmers as to the construction of these cribs. Mr. McClendon is not meeting large audiences, but is devoting his time to men likely to be interested in the conservation of corn, hoping in this way to have good cribs established on farms, particularly throughout southern Georgia, where it can be demonstrated to the surrounding farmers that the enormous losses now taking place through weevil attack can be profitably avoided.

F. B. Milliken is establishing a laboratory at 812 E. 11th St., Dallas, Tex., where he will continue his studies of mill pests, paying particular attention to the species of Tribolium.

H. H. Stage states that during the past month he has been engaged in reporting to the storage officer of the New Army Supply Base the condition of large supplies of foodstuffs stored in Brooklyn.